MICRON

FLYING MODEL ROCKET

- Ideal Beginner Rocket
- Streamer Soft Recovery
- Flights 1/3 Mile High

RECOMMENDED ENGINES
Not Included
½A6-4 A8-5 B4-6
B6-6 C6-7

SPECIFICATIONS
Length . . . . . 8.5"
Body Dia. . . . . 0.76"
Net. Wt. . . . . 0.4 oz.

Centuri

KA-5
(#2104)

Made in U.S.A. Centuri, Phoenix, Arizona

TYPICAL ALTITUDES
Altitudes depend greatly on the quality of assembly and finishing.

Engine	Feet	Engine	Feet
½A	260	B	950
A	500	C	1800

SKILL LEVEL

Beginner		Intermediate		Advanced
1	2	3	4	5

TOOLS YOU WILL NEED:

REQUIRED
White Glue
Plastic Glue
Modeling Knife

OPTIONAL
Small Brush
Balsa Filler
Fine Sandpaper
Spray Paint

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MICRON

MODEL ROCKETEER'S SAFETY CODE

CONSTRUCTION
My model rockets will be made of only lightweight materials such as paper, wood, plastic, and thin metallic foils, with the exception of payloads and engine holders made of wirelike material.

ENGINES
I will use only pre-loaded factory made model rocket engines in the manner recommended by the manufacturer. I will not change in any way nor attempt to reload these engines.

RECOVERY
I will always use a recovery system in my model rockets that will return them safely to the ground so that they may be flown again.

WEIGHT LIMITS
My model rocket will weigh no more than 453 grams (16 oz.) at liftoff, and the engines will contain no more than 113 (4 oz.) of propellant, as prescribed by Federal Regulations.

STABILITY
I will check the stability of my model rockets before their first flight except when launching models of already proven stability.

LAUNCHING SYSTEM
The system I use to launch my rockets will be remotely controlled and electrically operated, and will contain a switch that will return to "off" when released. I will remain at least 10 feet away from any rocket that is being launched.

LAUNCH SAFETY
I will not let anyone approach a model rocket on a launcher until I have made sure that either the safety interlock key has been removed or the battery has been disconnected from my launcher.

LAUNCH AREA
My model rockets will always be launched from a cleared area, free of any easy-to-burn materials, and I will only use non-flammable recovery wadding in my rockets.

BLAST DEFLECTOR
My launcher will have a blast deflector device to prevent the engine exhaust from hitting the ground directly.

LAUNCH ROD
To prevent accidental eye injury I will always place the launcher so the end of the rod is above eye level or cap the end of the rod with my hand when approaching it. I will never place my head or body over the launching rod. When my launcher is not in use I will always store it so that the launch rod is not in an upright position.

POWER LINES
I will never attempt to recover my rocket from a power line or other dangerous places.

LAUNCH TARGETS AND ANGLE
I will not launch rockets so their flight path will carry them against targets on the ground, and will never use an explosive warhead nor a payload that is intended to be flammable. My launching device will always be pointed within 30 degrees of vertical.

PRE-LAUNCH TEST
When conducting research activities with unproven designs or methods, I will, when possible, determine their reliability through pre-launch tests. I will conduct launchings of unproven designs in complete isolation from persons not participating in the actual launching.

FLYING CONDITIONS
I will not launch my model rocket in high winds, near buildings, power lines, tall trees, low flying aircraft or under any conditions which might be dangerous to people or property.

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IP-40/81020

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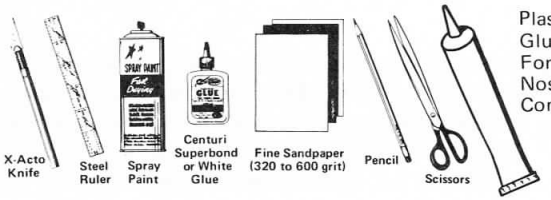
MICRON

SINGLE STAGE ROCKET

Simple design, high stability and easy to pack drag streamer provide the Micron with all the features of an excellent beginners kit. A properly finished Micron can gain altitudes as high as 2000 feet with a C engine. Specially designed decals lend a distinctive touch to this sleek little bird.

TOOLS – In addition to the parts supplied, you will need the following materials to assemble and finish this kit. DO NOT use model airplane glue for building flying model rockets.



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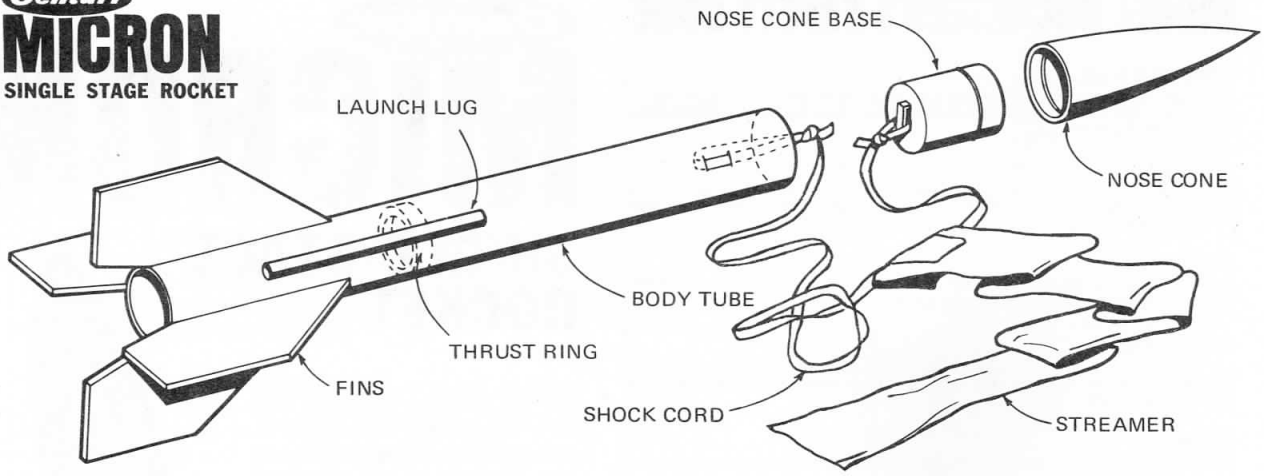
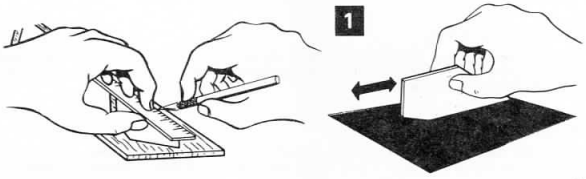
MICRON

SINGLE STAGE ROCKET

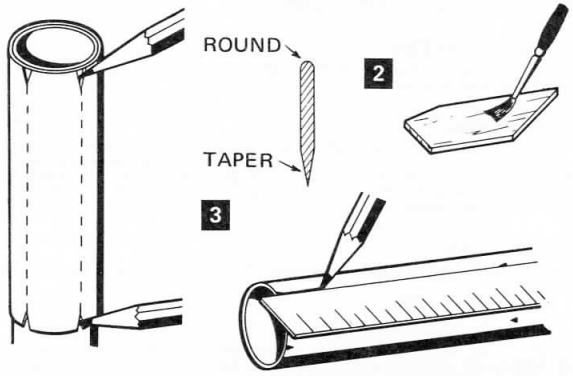


ASSEMBLY

1 Carefully cut out the fins with a sharp knife. Use a metal ruler for a cutting guide. Square up the fin edge by running over a piece of fine sandpaper. Round the leading edge of each fin and taper the trailing edge. Do not sand the root edge.

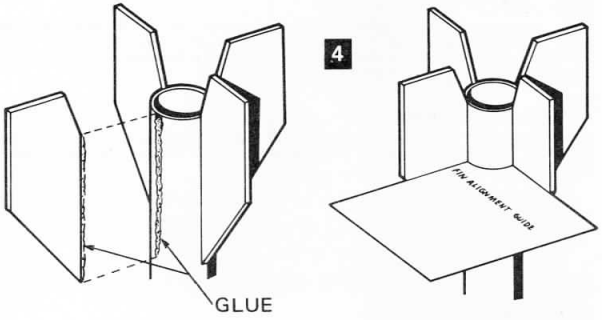


2 Coat the fins with balsa fillercoat. Allow to dry, then sand with fine sandpaper. Repeat this process until a smooth surface is obtained and all balsa grain disappears.

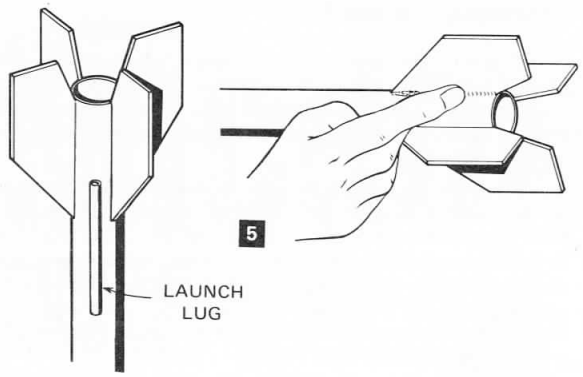


3 Wrap the fin positioning guide around the body tube and mark the fin locations. Using a ruler, draw a fine line connecting the marks.

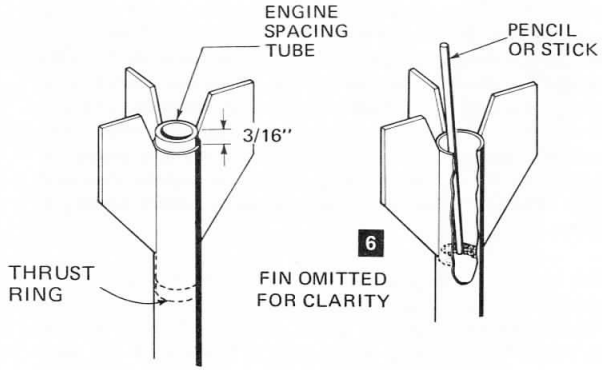
4 Apply glue to the fin root edges and to the fin locations on the body tube. Press the fins onto the body, making sure they are parallel with the long axis of the body. Check vertical alignment with the fin alignment guide and set aside to allow the assembly to dry.



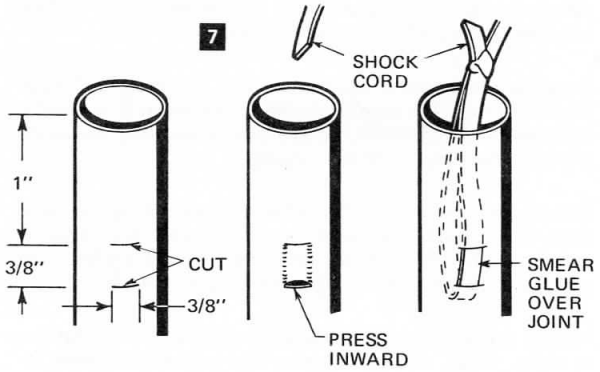
5 After the glue on the fin assembly has completely dried, run a fillet of glue along all fin-body tube joints. Smooth out the fillets with your finger. Cement the launch lug in place as shown. Sight along the launch lug to make sure it is parallel with the body.



6 Using a pencil or stick, place a bead of glue on the inside of the body approximately 2" from the bottom end. Insert the thrust ring into the end of the tube. Using the engine spacer push the thrust ring into the tube to a depth of 2 and 9/16". The engine spacer will project 3/16" from the bottom of the body tube. Remove the spacer immediately so it won't be accidentally cemented in place. Before the glue sets, reinsert the engine spacer to verify that the thrust ring is still at the correct depth.

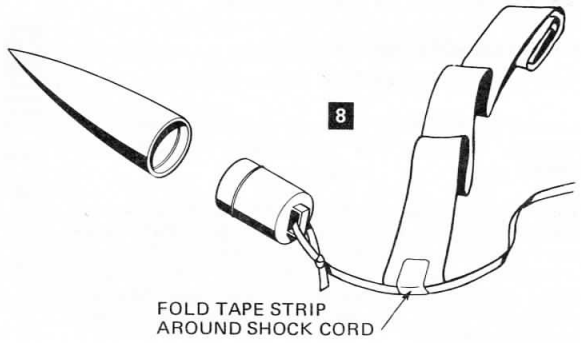


7 Cut two slits in the top of the body. Press the indicated area of the tube inward and drop the shock cord down thru the resultant slot. Pull the end of the shock cord back out thru the top of the tube and tie in a firm knot. Press the depressed portion back into place and smear a film of cement over the joint.



8 NOTE: If you do not wish to paint the nose cone, or if you wish to paint it a different color, postpone this step until after the rocket is painted. If you are going to paint the nose cone use only paints recommended for plastics.

Glue the nose cone base into the nose cone, engaging the snap ring into the groove in the cone. Tie the loose end of the shock cord securely to the lug on the nose cone base. Cut a 30" streamer from the long piece supplied (save the rest for replacement). Attach streamer to cord near nose cone, with the pressure sensitive tab.



FINISHING THE MICRON

Model rockets are easiest to see at high altitudes if they are painted in bright colors. Black is also often used since it presents a dark silhouette against the sky. Fluorescent paints are highly visible and add an interesting touch to most models.

Spray painting your finished model with a fast-drying enamel will produce the best results. . .IF IT IS DONE PROPERLY!!! Most important is the number of coats of paint. DO NOT try to paint your model with one heavy coat! Instead, give it a couple of quick, light coats first, and THEN a finish coat. Let each coat dry before applying the next. . .gently sanding the fins between coats with very fine sandpaper (400 to 600 grit). DO NOT SAND THE TUBE!!

Stand the rocket in a vertical position on a rod or dowel inserted into the engine tube. Wipe the rocket free of dust and dirt. Start spraying at one end of the rocket (NOT in the middle!). Moving the can up and down with quick, even strokes, passing beyond each end so that when the direction of motion is changed the spray doesn't get too heavy on one spot and cause a run. Hold the can vertical and about 12" away from the model, rotating the rocket slightly after each pass. Be sure to shake the can vigorously before starting to spray.

The finish coat should be applied a little heavier (slower strokes) and have a "wet" look when you're finished painting. Fluorescent paints are not glossy when dry, but can be made to "shine" by rubbing gently with # 600 wet & dry sand paper and spraying with a "clear" coating. If your paint pattern includes a separate color on the nose cone or fins, masking of selected parts will be necessary.

Decals are the easiest and fastest way to "dress up" your model rocket. The decal included with this kit is especially designed for this rocket but also available are many variations shown in the current Centuri catalog.

Dip the decal into water for a few seconds. Slide the decal from the backing paper onto the model rocket in its approximate position. Slide it into its proper position and then rub gently with a wet fingertip to remove any air bubbles.

Prepare the Micron for launching according to the illustrations at right. Note: Complete igniter and engine installation instuctions are included in "Engine Operating Instructions" which accompany all Centuri engines.

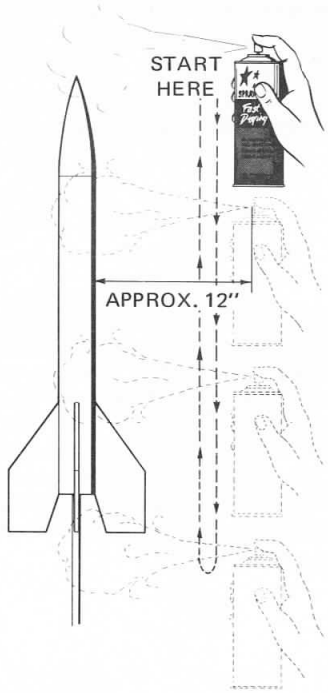
RECOMMENDED ENGINES

½A6-4 A8-5 B6-6 B4-6 C6-7

Launch the MICRON from any standard model rocket launcher having a 1/8" diameter x 36" long steel launch rod.

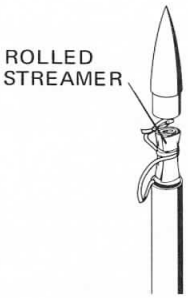
Referring to the specific instructions which accompany Centuri launchers and firing panels, mount the rocket on the launcher and prepare for ignition. Avoid eye injury by capping the exposed tip of the launch rod when not actually launching! Follow instructions and the Safety Code and have many happy hours with Model Rocketry!

Expended engine makes a handy launch rod cap



1. INSERT ENGINE

2. INSERT WADDING



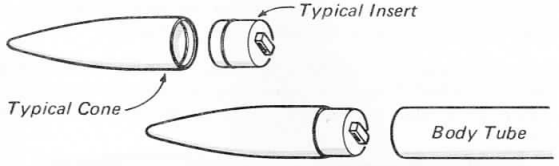
3. INSERT STREAMER

4. ASSEMBLE NOSE CONE

NOSE CONES

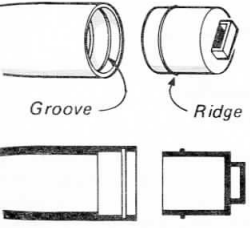
...e nose cone for the forward end of your ...e a few other kits still use balsa cones, plastic is now ...e preferred choice of many rocketeers. It requires no sanding, sealing or painting to have a smooth attractive finish. Plastic is also more durable than balsa . . . it does not dent or "crunch" as easily.

Your nose cone will be assembled from two parts: the cone itself, and an insert which firmly attaches to the cone, holding it inside the body tube.

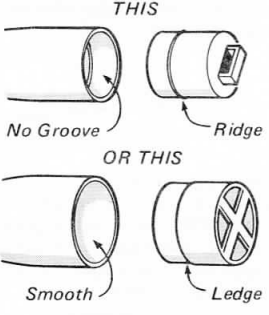


Your cone is one of these two types. Look at the drawings below to see which type you have.

SNAP TYPE



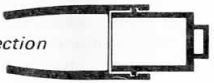
GLUE TYPE



(Cont. on other side)

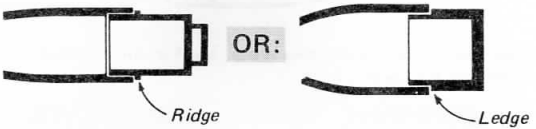
(Cont. from other side)

The Snap Type is assemb
ridge snaps into the groove.

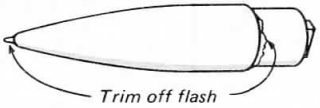


IMPORTANT: The snap type cones should be assembled with care and good judgement, to avoid breaking the cone . . . especially with the shorter #7 and #8 series (.76" and .91" diameter). Your insert may seem to be too tight a fit as you try to snap it in place. If so, play it safe by gluing the insert in, only to its ridge as shown below in the "Glue-Type" instruction.

The Glue Types are assembled by gluing together with PLASTIC MODEL CEMENT (available wherever plastic model kits are sold). The ridge or ledge on the insert butts up against the base of the cone.



For best appearance, trim away any plastic "flash" that may be on your cone.



Rub the cone briskly with a soft cloth to remove manufacturing oils, and produce a shiny finish. If you choose to paint your cone, DO NOT use model airplane "dope" or lacquer . . . it melts plastic. We recommend enamel, preferably a fast drying aerosol type (spray can) found in most stores which carry hobby items, hardware, or paint.

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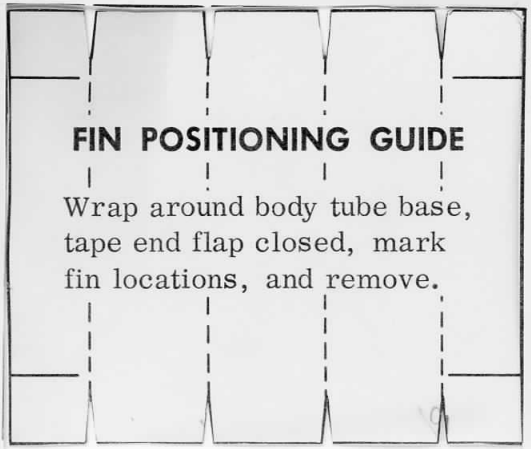
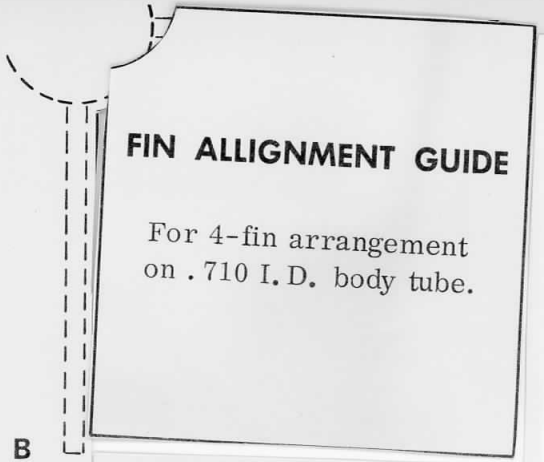
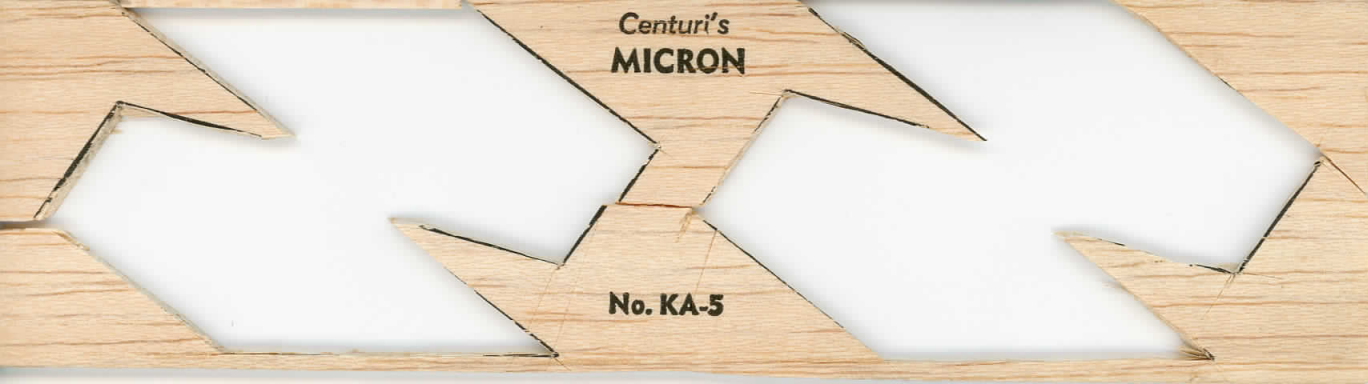
Centuri Engineering Co.
P.O. Box 1988
Phoenix, Arizona 85001


FIN POSITIONING GUIDE
Wrap around body tube base, tape end flap closed, mark fin locations, and remove.


FIN ALLIGNMENT GUIDE
For 4-fin arrangement on .710 I.D. body tube.
B


Centuri's
MICRON
No. KA-5